EXHIBIT 1

CURRICULUM VITA OF ALAIN DELCAYRE, PH.D.

Synopsis of career progression

Since 2005:	*BN ImmunoTherapeutics*	Senior Director of Research Director of Research	since 2009 2005-2008
2000-2005:	*Anosys Inc.* *(formerly AP Cells Inc.)*	Vice President, R&D Director of Research Senior Scientist II / Project Leader	(2004-2005) (2002-2003) (2000-2001)
1994-1999:	*Genesis R&D Corp. Ltd*	Senior Investigator/Project Leader Senior Staff Scientist II/Project Leader Senior Staff Scientist I/Project Leader	(1998-1999) (1996-1998) (1995-1996)
1989-1994:	*CIBR/Stratagene*	Senior Research Associate Staff Scientist *(Strategene)* Postdoctorate Research Associate	(1993-1994) (1991-1992) (1989-1990)
1983-1989 :	*Université Paris VI* *INSERM, U. 23* *École Polytechnique*	Ph.D. Graduation Predoctorate Student DEA graduation (Masters)	(1989) (1985-1989) (1983-1984)

MOST RECENT JOB RESPONSIBILITIES, QUALIFICATIONS & ABILITIES

Since 2005: **BN ImmunoTherapeutics, Mountain View, CA** (Subsidiary of Bavarian Nordic).

- Set up the Research department and GMP laboratory for R&D activities in the field of poxvirus-based cancer vaccines
- Supervision/management of preclinical cancer research, product development and immunomonitoring programs.
- Head of QC for product release assays developed and performed on site.
- Collaboration with QA, Regulatory Affairs and Medical Affairs; participation to IND submission and discussion with US and European regulatory institutions.
- Safety Officer

2000-2005: **Anosys Inc. (formerly AP Cells, Inc.), Menlo Park, CA**

- Supervised an R&D team assigned to support the company's lead product (autologous Dexosome vaccine) through Phase I and in preparation for Phase II cancer trials.

- Coordinated operations related to product characterization and assay & protocol development. Worked in collaboration with QA, QC, Regulatory Affairs and Medical Affairs.
- Initiated novel research projects and developed an exosome-based technology platform to broaden the company's pipeline of products.
- Established collaborations with corporate partners and academic groups. Presented and promoted Anosys technologies to partners, investors and potential customers.
- Set up new Groups/Departments (Molecular Biology Group of 4; Business Unit of 8).

1994-1999: Genesis R&D Corporation LTD, Auckland, New Zealand

- Contributed to the launching of a Forestry research program and of a corporate partnership between the New Zealand Forestry industry and Genesis.
- Supervised multi-disciplinary teams successively or concomitantly with projects in the fields of Plant Genomics, Vaccine and Immunotherapy.
- Set up new Groups/Departments (Molecular Expression; Forestry).

MAIN SCIENTIFIC ACHIEVEMENTS IN BIOTECHNOLOGY INDUSTRY

- Managed R&D programs to 1) establish proof-of concept experiments for submission of two IND applications for MVA-based vaccine evaluation in breast and prostate cancer patients, 2) monitor immune responses in cancer patients and 3) develop release assays for vaccines in clinical development.
- Developed a technology platform, called Exosome Display, with applications for the generation of antibodies against difficult targets and the development of improved genetic vaccines.
- Generated a panel of novel anti-exosome antibodies with applications as research and diagnostic tools. Some of these antibodies are also potential therapeutic tools as they may be used to block the exosome pathway.
- Designed a RT-PCR-based MAGE assay for the screening of cancer patients entering Anosys phase I lung cancer clinical trial.
- Designed and developed a multi-epitope vaccine against *M. tuberculosis* up to preclinical phase using a novel genome-wide approach for epitope screening.
- Contributed to the characterization of Autologous Dexosome vaccine and *PVAC* tested in the clinic for the treatment of cancer and *psoriasis*, respectively.
- Other innovative approaches designed when addressing new scientific challenges include:
  - ✓ A genome-wide approach to identify mycobacterial adjuvants
  - ✓ A PCR-based screening assay to identify secreted proteins from woody plants
  - ✓ A method to screen ligand-specific receptor isoforms using anti-idiotypic antibodies

PATENTS

- ✓ **Delcayre, A.**, Laus, R., Mandl, S, Legrand F. & Rountree, R.. Use of MVA to treat prostate cancer.*(Appl.20090104225; allowed, patent issuance pending)*
- ✓ **Delcayre, A.**, Laus, R. & Mandl, S.. Methods for treating cancer with MVA *(Appl. 2008021330; prosecution in progress)*
- ✓ **Delcayre, A.** and Le Pecq, J-B. Exosome ligands, their preparation and uses *(Appl.20090148460 Provisional submission; abandoned).*
- ✓ **Delcayre, A.**, and Le Pecq, J-B. (WO 2004/073319). Methods and compounds for raising antibodies and screening antibody repertoires *(Appl. 20060222654; prosecution in progress).*
- ✓ **Delcayre, A.** and Le Pecq, J-B. US Patents 7,704,964 Methods and compounds for the targeting of proteins to exosomes.
- ✓ **Delcayre, A.** US Patents 6,436,898, 6,358,734, 7,192,590, & 7,041,295. Compounds for the treatment of infectious and immune system disorders and methods for their use.
- ✓ **Delcayre, A.** US Patents 6,716,430 & 6,361,776. Compounds isolated from *M. vaccae* and their use in the modulation of immune responses.

PUBLICATIONS

- ✓ Li, Z, Ling L, Liu X, Laus R and **Delcayre A**. A flow cytometry-based immune-titration assay for rapid and accurate titer determination of modified vaccinia Ankara virus vectors. *J Virol. Methods (2010) in press.*
- ✓ Zeelenberg IS, Ostrowski M, Krumeich S, Bobrie A, Jancic C, Boissonnas A, **Delcayre A**, Le Pecq JB, Combadière B, Amigorena S, Théry C. Targeting tumor antigens to secreted membrane vesicles in vivo induces efficient antitumor immune responses. *Cancer Res.* 2008 Feb 15;68(4):1228-35.
- ✓ Estelles, A., Sperinde, J. Roulon, R., Aguilar, B. Bonner, C., Le Pecq, J.B and **Delcayre, A.** Exosome nanovesicles displaying G protein-coupled receptors for drug delivery. *Int. J. Nanomedicine* 2007, 2(4):751-760.
- ✓ **Delcayre, A.** and Le Pecq, JB. Exosomes as novel therapeutic nanodevices. *Current Opinion in Molecular Therapies* 2006, 8(1):31-38.
- ✓ **Delcayre, A.**, Estelles, A., Sperinde, J., Roulon, T., Paz, P., Aguilar, B., Villanueva, J. and Le Pecq, JB. Exosome Display Technology: Applications to the Development of Novel Diagnostics and Therapeutics. *Blood Cells, Molecules and Diseases* 2005, 35(2):158-168.
- ✓ **Delcayre, A.**, Shu, H. and Le Pecq, JB. Dendritic cells-derived exosomes in cancer immunotherapy: Exploiting Nature's antigen delivery pathway. *Expert Rev. of Anticancer Therapy* 2005, 5(3):537-547.
- ✓ Silvestre, J.S., Théry, C., Hamard, G., Boddaert, J., Aguilar, B., **Delcayre, A.**, Houbron, C., Tamarat, R., Clergue, M., Duriez, M., Merval, R., Lévy, B., Tedgui, A., Amigorena, S. and Mallat, Z. Lactadherin/MFG-E8: a novel angiogenic protein required for VEGF signalling. *Nature Med.* 2005, 11(5):499-506.
- ✓ Morse, M.A., Garst, J., Osada, T., Khan, S., Hobeika, A., Clay, T.M., Valente, N., Shreeniwas, R., Sutton, M.A., **Delcayre, A.**, Hsu, D.H., Le Pecq, J.B. and Lyerly, H.B. A Phase I Study of Dexosome Immunotherapy in Patients with Advanced Non-Small Cell Lung Cancer. *J. Transl. Med.* 2005, 3:9-16.

- ✓ **Delcayre, A.**, Peake, J.S., White, D.J., Yuan, S., MacDonald, M.K., Liang, A., Tan, P.L. and Watson, J.D. A genome-based functional screening approach to vaccine development combining *in vitro* assays and DNA immunization. *Vaccine* 2003, 21:3259-3264.
- ✓ **Delcayre, A.**, Lotz, M. and Lernhardt, W. Inhibition of Epstein-Barr virus-mediated capping of CD21/CR2 by interferon-α: immediate anti-viral activity of IFNα during the early phase of infection. *J. Virol.* 1993, 67:2918-2921.
- ✓ **Delcayre, A.**, Salas, F., Mathur, S., Kovats, K., Lotz, M. and Lernhardt, W. (1991) Epstein-Barr virus/Complement C3d receptor is an Interferon α receptor. *EMBO J.* 10, 919-926.
- ✓ Salas, F., Kovats, K., Mathur, S., Sakamoto, B., Benitez, M.R., **Delcayre, A.**, and Lernhardt, W. (1989) Production of complement component C3 by lymphoid cell lines: Possible function of C3 fragments as autocrine growth regulators. In *Progress in Immunology*, Vol. VII. Springer-Verlag, Berlin, 202-204.
- ✓ **Delcayre, A.**, Fiandino, A., Lyamani, F., Barel, M., and Frade, R. (1989) Enhancement of Epstein-Barr virus/C3d receptor (CR2) and nuclear p120 ribonucleoprotein phosphorylation by specific EBV/C3dR ligands in subcellular fractions of the human B lymphoma cell line, Raji. *Biochem. Biophys. Res. Comm.* 159, 1213-1220.
- ✓ Barel, M., Fiandino, A., **Delcayre, A.**, Lyamani, F., and Frade, R. (1988) Anti-idiotypic anti-Epstein-Barr virus/C3d receptor (EBV-C3dR) antibodies detect two distinct binding sites, one for Epstein-Barr virus and one for C3d on gp140, the EBV-C3dR, expressed on human B lymphocytes. *J. Immunol.* 141, 1590-95.
- ✓ **Delcayre, A.**, Fiandino, A., Barel, M. and Frade, R. (1987) Gp140, the EBV-C3d receptor (CR2) of human B lymphocytes is involved in cell-free phosphorylation of p120, a nuclear ribonucleoprotein. *Eur. J. Immunol.* **17**, 1827-1833.